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# PERTUSSIS ALERT: LOS ANGELES COUNTY PUBLIC HEALTH WARNS OF INCREASED PERTUSSIS (WHOOPING COUGH) ACTIVITY

September 20, 2002

This health alert is to inform health care providers about a marked increase in pertussis activity in Los Angeles County. The number of pertussis suspect cases reported so far this year is more than 50% above what was reported for the same time period last year. An increased number of pertussis cases has also been reported nationally as well as state-wide.

Health care providers are encouraged to increase their suspicion for pertussis among patients of all age groups, especially infants in the first year of life, and adolescents and adults. Persons who were immunized against pertussis as children may still be susceptible to infection as adolescents and adults because immunity from immunization wanes after five to ten years. Infants who get pertussis have the highest rate of complications which include pneumonia, seizures, encephalopathy, and death.

The majority of cases reported this year have been in infants one to three months of age, most of whom were infected by a coughing adolescent or adult. Bordetella pertussis has been estimated to account for 7% of cough illness per year in older adults and should be considered in any adolescent or adult with a persistent cough illness of 2 weeks or more, associated with or without coughing paroxysms. An attempt should be made to confirm all suspect pertussis cases by culture (special culture media required; see attached). PCR is also acceptable for lab confirmation in patients meeting the clinical criteria (see attached).

Prompt reporting of suspect pertussis cases (don't wait until culture results are back) is vital to prevent secondary spread to other susceptible persons. Report suspect cases in Los Angeles County immediately (within one working day of identification) to the Los Angeles County Department of Health Services by calling or faxing information to the Morbidity Central Reporting Unit at: phone 888-397-3993, fax 888-397-3778. Report residents of other health jurisdictions to their local health departments.

Attached is a flyer with additional information about diagnosing pertussis. You can also obtain more information from the Immunization Program web site at: lapublichealth.org/ip. Please feel free to call the Immunization Program at 213-351-7800 if you need additional information.

# Pertussis (Whooping Cough)

### Clinical Criteria (not affected by immunization history):

A cough lasting at least 14 days with one of more of the following and without other apparent cause\*: 1) Paroxysms of coughing; 2) Inspiratory whoop; and/or 3) Post-tussive vomiting.

\* Infants (under 6 months of age) may have cough, choking, cyanosis, without "whoop" or paroxysms.

Adults/teenagers/immunized children have milder illness, hacking cough, usually with mucus production and occasional paroxysms. Post-tussive vomiting or gagging can occur without "whoop". Mimics bronchitis.

#### **Case Classification**

- **Probable**: A case that meets clinical criteria but has not been laboratory confirmed or epidemiologically linked to a laboratory-confirmed case.
- **Confirmed**: A clinically compatible case that is laboratory-confirmed (positive culture or positive PCR) or epidemiologically linked to a laboratory confirmed case.

## **Differential Diagnosis:**

Infections caused by Mycoplasma, Chlamydia adenovirus, RSV; foreign body aspiration, and chronic/acute bronchitis cause by other agents.

# **Laboratory Testing:**

Laboratory confirmation of the diagnosis by culture for *B. pertussis* should be attempted. A specimen obtained by nasal pharyngeal aspiration or swab must be immediately innoculated onto Bordet-Gengou or Regan-Lowe media. The organism is most likely to be isolated during catarrhal stage and first 1-2 weeks of paroxysmal cough stage. Collect nasopharyngeal culture before starting antibiotics. (Cultures can often still be positive up to 5 days after start of antibiotics.)

DFA has variable sensitivity and specificity, therefore, a positive result suggests the diagnosis, but is not confirmatory; a negative result does not rule out pertussis.

Lymphocytosis (absolute lymphocyte count >12,000; or WBC >20,000 with >60% lymphs) suggests pertussis. Milder lymphocytosis is seen in infants. Adults and immunized children have minimal or no lymphocytosis. Serological testing is not helpful in diagnosing individual cases.

#### **Treatment of Cases and Preventive Treatment of Contacts:**

All cases, their household members and other close contacts, regardless of age and immunization status, should receive erythromycin for 14 days, or an alternative antibiotic. The goal of treatment is to reduce spread of infection within the household and the community at large.

#### **Report to Public Health:**

Report suspected and confirmed cases to the County of Los Angeles Department of Health Services, Morbidity Central Reporting Unit. Report by telephoning, electronically transmitting, or mailing report within one working day of identification of a case or suspected case (Telephone: 888- 397-3993 or 213- 351-7440; Fax: 888-397-3); MCRU, 313 N. Figueroa, Rm 117, Los Angeles, 90012).